

## CHAPTER

# 14

## PSYCHOPATHOLOGY

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Analyses of psychopathology among Asian Americans usually involve a series of questions that increase in complexity. For example, one can start with a basic question—What are the rates of mental disorders among Asian Americans?—and generate a whole set of more complex questions: Are Asian Americans at increased risk for mental illness? Does culture affect how Asian Americans experience stressors and psychopathology? Do Asian Americans exhibit unique patterns of symptom expression? How are rates of mental disorders determined, and are assessment and diagnostic procedures valid for Asian Americans?

This chapter addresses these questions by reviewing the current state of research on Asian Americans, which, in many respects, remains quite limited. For heuristic purposes, we propose a multicomponent model for the analysis of psychopathology among Asian Americans. The components of this model include (a) Vulnerability (biopsychosocial considerations that increase or decrease risk for psychopathology), (b) Experience (the cognitive and emotional organization of psychopathology), (c) Manifestation (symptom expression of psychopathology), and (d) Prevalence (the extent of psychopathology in the population). In positing a Vulnerability-Experience-Manifestation-Prevalence model, we have

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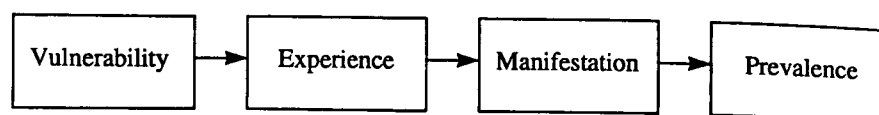


Figure 14.1. Conceptual Model for the Analysis of Psychopathology

delineated four common components of psychopathology to examine the importance of cultural and minority group factors in each component. Nevertheless, the components in our model are logically linked, as depicted in Figure 14.1, and can be used to conceptualize psychopathology for all populations.

*Vulnerability* encompasses those person and environmental factors that contribute to the development of psychopathology. According to the diathesis-stress model (Meehl, 1962; Rosenthal, 1970), certain environmental stressors may activate an inherent predisposition or diathesis to illness. This model has particular relevance for Southeast Asian refugees given their repeated exposure to catastrophic environmental stressors such as premigration war trauma. Furthermore, many Southeast Asian refugees have experienced multiple life changes in their native lands, during migration, and on resettlement in the United States that might compound their risk for psychopathology. Past research shows that undesirable life changes are correlated with anxiety, depression, and physical symptoms (Sarason, Johnson, & Siegel, 1978). Research also has demonstrated that genetic factors may contribute to certain psychiatric disorders such as panic disorder (Crowe, Noyes, Pauls, & Slymen, 1983; Torgersen, 1983), unipolar and bipolar mood disorders (Goodwin & Guze, 1984), and schizophrenia (Kendler, 1983, 1988). Is it possible that Asian Americans possess unique genetic or biological risk factors for psychopathology? Research is far from conclusive, but investigators have found significant psychobiological differences between Asians and Whites in their reactivity to alcohol (Akutsu, Sue, Zane, & Nakamura, 1989) and psychopharmacological agents (Lin, Lau et al., 1988; Lin, Poland, Nuccio et al., 1989; Lin, Poland, & Lesser, 1986) that eventually might help clarify the role of psychobiology in the etiology of mental illness among Asians.

A preexisting vulnerability coupled with environmental stressors may lead to the *Experience* of mental illness. Kleinman (1988) asserted that individuals conceptualize the nature and causes of psychopathology in terms of culturally embedded "explanatory models" of mental illness. In support of this notion, research illustrates that Asian Americans may organize and perceive mental health in a culturally distinct manner. Asian cultures hold unique conceptualizations, nomenclature, and coping responses that often challenge Western perspectives of mental health. Such cultural differences are especially noteworthy for recently arrived Asian Americans who organize their concepts of mental health around traditional folk beliefs, as will be seen later in this chapter.

*Manifestation* is closely linked to Experience and constitutes the expression and course of psychopathology. It is widely recognized that symptom presenta-

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## VULNERABILITY

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tions for particular disorders often vary across ethnic groups. For example, Kitano (1969) found that Japanese schizophrenics exhibited more withdrawal symptoms than acting out behaviors. Kitano attributed this finding to the Japanese culture, which reinforces internal or intrapersonal means of resolving conflicts. In addition, the literature on depressive symptomatology among Asian Americans illustrates that Asians tend to underreport psychological problems and overendorse bodily complaints compared to other ethnic groups. Finally, studies also indicate that Asian Americans may exhibit symptoms that are associated with culture-specific syndromes such as *koros* as witnessed in the Chinese and Southeast Asian cultures and *hwabyung* as witnessed in the Korean culture. Such syndromes provide the most compelling examples of cultural variability in symptom expression.

Lastly, *Prevalence* focuses on the actual reported rates of psychopathology among Asian Americans. Determining the prevalence of psychopathology among Asian Americans is a formidable task given that large-scale epidemiological studies have not been conducted in this ethnic population. Prevalence estimates based on use of mental health services have been misleadingly low because Asian Americans tend to underutilize such services. Furthermore, numerous assessment and diagnostic instruments that are used in prevalence studies emphasize Western health concepts and, therefore, might lack construct validity for Asian Americans. The development and theoretical basis of culture-specific instruments and their contribution to the assessment and diagnosis of Asian Americans are examined in this chapter.

In summary, the components of the Vulnerability-Experience-Manifestation-Prevalence model are logically linked. Vulnerability factors may contribute to the development of psychopathology, whereas the cognitive and emotional responses to these factors comprise the experience of mental illness. In turn, experience affects how psychopathology is manifested, and the manifestation of disorders forms the basis for prevalence estimates. As will be seen throughout this chapter, cultural factors and/or minority group status are intimately involved in all of these processes for Asian Americans.

Before discussing the research literature, two caveats are in order. First, research on overseas Asians is included in this chapter despite the psychological, sociopolitical, and economic differences they might have with their Asian American counterparts. In many respects, however, these two groups are culturally similar, and the abundant studies on overseas Asians have made major conceptual contributions to the study of Asian American health. Second, heterogeneity exists among Asian American groups. It is difficult to appreciate this heterogeneity because many Asian American groups are overlooked in research, and findings from one group often are generalized to the entire population.

## VULNERABILITY

Are Asian Americans at increased risk for psychopathology? Past research strongly suggests that this is indeed the case for certain segments of the Asian American

population. However, it is difficult to determine the extent to which biological and environmental vulnerability factors contribute to mental illness for Asians. Investigating biological vulnerabilities is especially difficult given the inherent complexity of the research; thus, it remains a matter of conjecture whether Asian Americans are more biologically predisposed to certain mental disorders than are other ethnic groups. Nevertheless, investigations on the response to alcohol and psychotropic medications demonstrate that significant psychobiological differences exist between Asians and Caucasians. For example, in regard to alcohol intake, Lin, Poland, Smith, Strickland, and Mendoza (1991) noted that approximately half of all East Asians, such as the Chinese and Japanese, lack the active form of the aldehyde dehydrogenase, which may contribute to the high incidence of "flushing" (e.g., facial flushing, palpitation, tachycardia, dysphoria, nausea, vomiting) among Asians. Furthermore, these researchers also stated that 85% to 90% of Asians possess an atypical alcohol dehydrogenase isozyme that has the capacity to convert alcohol into acetaldehyde, a highly toxic substance that contributes to flushing when it is accumulated. Finally, psychopharmacological studies have shown that Asians, when compared to Caucasians, require lower dosages for optimal clinical response to haloperidol (Lin et al., 1989), alprazolam (Lin et al., 1988), and tricyclic antidepressants (Lin et al., 1986). Lin and colleagues (1989) suggested that such findings might stem from ethnic differences in neurological receptor mediated responses between Asians and Caucasians. Still, these studies do not indicate whether Asians possess culturally distinct biological vulnerabilities to mental illness.

Research on newborn infants further highlights ethnic differences in the psychobiology of Asians and Caucasians. Freedman (1975) compared 24 Chinese American newborns to 24 Caucasian American newborns according to five categories: (a) temperament, (b) sensory development, (c) autonomic and central nervous system maturity, (d) motor development, and (e) social interest and response. Although a substantial overlap among all infants was found along these five categories, the two groups significantly differed on items measuring temperament and on those that appeared to assess excitability/imperturbability. The Chinese American newborns tended to be less changeable and perturbable, habituated more quickly, and calmed themselves more readily when upset compared to the Caucasian newborns. Although these findings are inconclusive, they suggest that important psychobiological differences exist between Asians and Caucasians, especially considering that these findings were evident at such an early age.

Unlike the lack of research on biological vulnerabilities, there are numerous studies that link environmental stressors to increased risk for psychopathology among Asian Americans. This is especially the case for the growing influx of Asian immigrants and Southeast Asian refugees who encounter multiple environmental stressors in the United States such as culture conflicts, language problems, strained financial resources, prejudice and discrimination, and lack of familiar and adequate social support. Furthermore, many of the Southeast Asian refugees have been repeatedly traumatized prior to their entry into the United States, as will be discussed later in the chapter.

Past research problems among with a limited pe higher degree of relationship was not Personality Invent culties for a samp or less in the Uni students in their s than Chinese stu however, the acad those of the gene demic performan or adjustment fo and Zane (1990), foreign-born Asia justment. Results reported greater l even after contro desirability, self-c attuned to the des given that the fo States for an avera that many foreign of social support cal adjustment.

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Past research illustrates that immigrant status increases the risk for adjustment problems among Asian Americans. Ying (1988) found that foreign birth coupled with a limited period of residence in the United States was associated with a higher degree of depressive symptoms for Chinese Americans, although this relationship was not significant when social class was controlled. Using the Omnibus Personality Inventory, Sue and Zane (1985) likewise reported adjustment difficulties for a sample of recently immigrated Chinese students who spent 6 years or less in the United States. These researchers stated that the immigrant Chinese students in their study were less autonomous and extroverted and more anxious than Chinese students who had lived longer in the United States. Interestingly, however, the academic achievement levels of the foreign-born students exceeded those of the general student body. Therefore, Sue and Zane cautioned that academic performance should not be used as an indicator of psychological well-being or adjustment for newly arrived Chinese college students. In another study, Abe and Zane (1990) found significant differences between Caucasian American and foreign-born Asian American college students on a measure of psychological adjustment. Results from this study demonstrated that foreign-born Asian Americans reported greater levels of interpersonal distress than did their White counterparts, even after controlling for demographic differences and the influences of social desirability, self-consciousness, extraversion, and other-directedness (i.e., being attuned to the desires and needs of others). These results are especially interesting given that the foreign-born Asian American sample had resided in the United States for an average of 10 years. Abe and Zane proposed that the various stressors that many foreign-born Asian Americans face, such as language barriers and loss of social support networks, might have long-term negative effects on psychological adjustment.

Kuo and Tsai (1986) presented several interesting findings in their study of Asian immigrants who resettled in Seattle, Washington. These researchers found that the Koreans, the most recently arrived immigrants, exhibited twice the rate of depression compared to the Chinese, Japanese, and Filipino groups under investigation. For the overall sample, immigrants who possessed accurate information about living in the United States prior to immigration reported fewer financial worries and adjustment difficulties, such as problems with the English language, homesickness, and lifestyle changes, than did those without such information. Immigrants who moved at an earlier age also experienced fewer adjustment difficulties. In regard to social support, immigrants who reported having numerous friends who were available for frank discussions, or "available" relatives in one's residential area, exhibited fewer depressive symptoms than did those who lacked such an extensive social network. Finally, Kuo and Tsai found that immigrants with "hardy" personalities reported less stressful life events, financial worries, adjustment difficulties, and symptoms of depression than did those who lacked hardy traits. Thus, hardy Asian immigrants, or those who felt a sense of control over their life events, maintained a strong commitment to their life activities, and perceived change as an exciting opportunity for personal development, were more likely to display positive adjustment to their new American lifestyles.

Studies also have consistently shown that Southeast Asian refugees constitute a high-risk group for mental disorders. Adjustment difficulties in Southeast Asian refugees have been linked to repeated exposure to catastrophic environmental stressors such as torture, combat, witnessing the death of family members and relatives, and forcible detainment in harsh refugee camp conditions. In one particular study, Southeast Asian refugees who had experienced multiple premigration traumas were significantly at risk for experiencing psychosocial dysfunction or impaired daily functioning (Chun, 1991).

The extent of traumatization in the Southeast Asian refugee community has been widely documented. Gong-Guy (1987), in a statewide mental health needs assessment, reported that 55% of Southeast Asian refugees experienced separations from or deaths of family members, with 30% experiencing multiple separations or losses. For the Cambodian sample alone, nearly two thirds of the surveyed adults endured the loss of family members. Cambodian women were particularly traumatized; more than one in five experienced the death of a husband. Many of these women described incidences of unspeakable trauma in which they witnessed their husbands and children being shot, tortured, or starved to death or instances in which they were wounded or victimized themselves. Mollica, Wyshak, and Lavelle (1987) also reported episodes of repeated traumatization in their Southeast Asian refugee patient sample. These researchers found that the Southeast Asians in their study had experienced an average of 10 traumatic episodes that were characterized by various atrocities such as deprivation of food and water, torture, physical injury from war, sexual abuse, and solitary confinement.

Elevated rates of mental disorders have coincided with multiple traumatic episodes for Southeast Asian refugees. Kinzie and colleagues (1990) reported that 70% of their overall Southeast Asian refugee patient sample met *DSM-III-R* criteria for a current diagnosis of posttraumatic stress disorder (PTSD) and 5% met criteria for a past diagnosis (American Psychiatric Association, 1987). Furthermore, 82% suffered from depression, the most common non-PTSD diagnosis, and approximately 16% had schizophrenia. The elevated incidence of PTSD among these highly traumatized Southeast Asian refugees was even more alarming when group differences were analyzed. In this case, PTSD was diagnosed in 95% of the Mien sample (a highland tribe from Laos) and in 92% of the Cambodian sample. The clinical significance of these findings is underscored by the fact that most of these PTSD sufferers had experienced their traumatic events 10 to 15 years prior to assessment. Such prolonged effects of trauma on psychological functioning also were evidenced in a follow-up study of Cambodian adolescents who had survived Pol Pot's concentration camps (Kinzie, Sack, Angell, Clarke, & Ben, 1989). In this study, 48% of the adolescents suffered from PTSD and 41% experienced depression approximately 10 years after their traumatization.

Similar results were found by Mollica, Wyshak, and Lavelle (1987). About 50% of their Southeast Asian refugee patients fulfilled *DSM-III* criteria for PTSD, and 71% suffered from major affective disorder. Certain groups had even higher prevalence rates. The Hmong/Laotian group exhibited the highest rates at 92%

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for PTSD and 85% for major affective disorder, whereas 57% and 81% of the Cambodians suffered from PTSD and major affective disorder, respectively.

In a point prevalence study of adult Hmong refugees, a rural and agrarian people from Laos, Westermeyer (1988) found that 43% met *DSM-III* criteria for various Axis I diagnoses such as adjustment disorder, major depression, and paranoia. Westermeyer emphasized that despite the relatively small sample ( $N = 97$ ) that was investigated, the high rate of Axis I diagnoses exhibited by these refugees—twice the expected rate for the general U.S. population—underscored the degree of psychopathology that is likely to occur in Southeast Asian refugee groups.

In addition to premigration trauma, certain postmigration status variables also have been associated with increased susceptibility for adjustment difficulties among Southeast Asian refugees. Older age has been associated with more symptoms of depression for Hmong refugees (Westermeyer, Neider, & Callies, 1989), and being a divorced or widowed female head of household has been linked to increased susceptibility for psychological and physical complaints (Lin, Tazuma, & Masuda, 1979). Other postmigration variables that might predispose Southeast Asians to adjustment difficulties include limited English proficiency (Nicassio, Solomon, Guest, & McCullough, 1986), a 10- to 12-month length of stay in the host country (Beiser, 1988), and low income and less education (Nicassio & Pate, 1984). In support of these findings, Tran (1989) found that low income, a poor educational background, and limited English-speaking skills were negatively associated with psychological well-being in Vietnamese refugees. Finally, researchers also have discovered a significant relationship between yearnings to return to one's native land and mental health problems. In a study by Westermeyer et al. (1989), Hmong refugees who maintained the wish to return to Asia had a higher probability of exhibiting psychopathology. However, Abe, Zane, and Chun (1994) found that preservation of cultural identity and affiliation with one's ethnic community in the United States acted as protective factors against posttraumatic stress for Southeast Asian refugees. These researchers also found that trauma-related anger played a significant role in adjustment; refugees without PTSD expressed less anger than did their counterparts who suffered from this disorder.

Asian American Vietnam war veterans represent another high-risk group due to their exposure to adverse environmental stressors that compounded the trauma of combat. Many of these veterans encountered racism by fellow U.S. soldiers, faced combat experiences that challenged traditional cultural norms, and identified with a wartime enemy who, in many respects, could be regarded as a fellow Asian (Chun & Abueg, 1989). A Japanese American marine corporal described his experience in a military training class:

I was used as an example of a gook. You go to class and they say you'll be fighting the VC [Viet Cong] or the NVA [North Vietnamese Army]. But then the person who was giving the class will see me and he'll say, "He looks just like that, right there." (quoted in Hamada, Chemtob, Sautner, & Sato, 1988)

Population estimates from the National Vietnam Veteran Readjustment Study (Kulka et al., 1988) indicate that approximately 34,100 of the 3.1 million men and women who served in the Vietnam war zone were of either Asian American or Pacific Islander descent. Although the prevalence rate of mental illness among Asian American Vietnam veterans is speculative, one study (Matsuoka & Hamada, 1991) reported PTSD rates of 0% for Japanese Americans to 40% for various Pacific Islander groups (e.g., Samoans, Tongans, Guamanians). Although these reported rates remain somewhat speculative due to acknowledged methodological difficulties, they highlight the variable risk status of different Asian American veteran groups.

In respect to the preceding findings, there currently is no conclusive evidence that Asian Americans are more biologically vulnerable to certain mental disorders than are other ethnic groups. However, this does not imply that significant psychobiological differences between Asians and Caucasians do not exist. Research provides strong evidence that Asians and Caucasians differ significantly in their psychobiological reactions to both alcohol and psychotropic medications. Studies of newborn infants also suggest that important psychobiological differences exist between Asians and Caucasians, as evidenced in early developmental differences in temperament and excitability/imperturbability. The role of biology in the development of mental illness among Asian Americans requires further exploration nonetheless.

Studies have uncovered numerous environmental stressors that place Asian immigrants and refugees at increased risk for psychopathology. Such stressors include culture conflicts, language difficulties, lack of social supports, and financial strain that might contribute to the elevated rates of depression and anxiety disorders that have been reported in these communities. Still, Kuo and Tsai (1986) found that Asian immigrants with hardy personality traits are less susceptible to adjustment difficulties than are those without such traits. Settling in the United States poses yet additional environmental stressors to Southeast Asian refugees, many of whom already have faced the trauma of war and political upheaval in their native lands. This traumatized group exhibits elevated rates of PTSD and depression that are even more alarming when group differences and sociodemographics are analyzed. In this case, women in highly traumatized groups, such as the Cambodians and Hmong, are especially vulnerable to psychopathology. Lastly, research also suggests that Asian American Vietnam veterans are at increased risk for mental illness due to their repeated exposure to combat trauma and racial victimization. Because this special group of veterans tends to avoid mental health services for both cultural and sociopolitical reasons, many continue to suffer in silence and have truly become the forgotten warriors of a devastating war.

## EXPERIENCE

Does culture affect how Asian Americans experience stressors and psychopathology? Marsella (1988) offered a definition of culture that provides some insight to this question. Marsella defined *culture* as

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In this context, culture may be regarded as the basis from which Asian Americans experience mental illness; it plays an important role in shaping traditional health beliefs, coping strategies, representations of the self, and terminology that meaningfully describes physical and emotional states.

The influence of culture on traditional Asian health beliefs is most evident in the Chinese term for psychology itself, which is composed of two characters depicting "heart" and "logic" or "thought." In this sense, the Chinese culture ascribes to the notion that thought is intimately tied to the heart, which is the seat of emotional and physical health. Ying (1990) found support for this cultural construct among immigrant Chinese women who framed the experience of mental illness within this dynamic soma and psyche concept. When asked to conceptualize the problems of a depressed Asian woman in a fictitious scenario, Ying's participants responded by describing the causes and consequences of depression both in psychological (e.g., low/unstable mood) and physiological (e.g., heart problems) terms.

Research also suggests that the Asian American experience of mental illness might reflect Western beliefs of stress and adjustment as well. Loo, Tong, and True (1989) found that mental health beliefs among Chinese residents of San Francisco's Chinatown were more Westernized than expected. In this case, 30% of Loo et al.'s community sample believed that mental disorders were caused by pressures and problems (e.g., overstressed, overworked, pressure at work), whereas 20% attributed them to personality (e.g., too sensitive), 8% to neglect (e.g., lack of love), and 5% to a combination of these causes. Interestingly, only 7% held the more traditional Asian belief that mental disorders were caused by genetic or organic factors. Loo et al. suggested that the participants in their study endorsed more Western-oriented health beliefs because they were more acculturated compared to the samples in previous studies. This is substantiated by the fact that 40% of Loo et al.'s sample had lived in the United States for more than 10 years and 30% had lived in this country for more than 20 years. By contrast, Ying's (1990) participants had resided in the United States for an average of only 2.7 years.

The coping strategies of Asian Americans also might differ from those of other ethnic groups due in part to cultural differences in the conceptualization of mental and physical illness. For instance, the immigrant Chinese women in Ying's (1990) study were more likely to seek professional help (e.g., psychologist, medical doctor, government support) if they conceptualized depressive symptoms in predominantly physiological terms. Conversely, those who emphasized the psychological aspects of depression were more inclined to seek nonprofessional help (e.g., advice from family, husband, friend, or elderly) or rely on their own



ment in the problem) and less internally caused than did Caucasians. Furthermore, there was a consistent acculturation effect such that foreign-born Asians rated these interpersonal problems even less personally involving and internally caused than did American-born Asians. Based on these findings, Okazaki and Zane proposed that Asians are more other-directed and situationally oriented than Caucasians; thus, Asians tend to place less emphasis on internal attributions and personal involvement in interpersonal conflict.

Finally, culture may influence how Asians describe and express their emotional and psychological states. Russell (1991) illustrated that emotional and psychological terminology found in Asian cultures often lacks semantic equivalents in Western psychiatric nomenclature. For example, Russell mentioned that the Chinese culture does not possess an exact translation for Western notions of depression, guilt, and anxiety. Furthermore, Cheng (1977) noted that two Chinese words that are similar to "anxiety" are better translated as "tension" and "worry." Tseng and Hsu (1969) stated that "depressed mood," as construed in the West, does not have a cultural equivalent in colloquial Mandarin spoken in Taiwan.

Russell (1991) further mentioned that preliterate societies that speak languages that are least similar to English show the greatest cultural variability in the categorization of emotional states. This has important implications for understanding and treating psychopathology among Southeast Asian refugees such as the Hmong, whose culture is without an indigenous written language. Thus, psychiatric concepts that are rooted in the Western culture, such as depression and anxiety, might fail to capture the psychosocial experience of these preliterate Southeast Asian peoples.

The preceding studies demonstrate that culture may influence numerous aspects of the Asian American experience of mental illness. For the Chinese, the traditional belief in the intertwining soma and psyche relationship may lead to both psychological and physiological conceptualizations of mental illness. Furthermore, such conceptualizations may determine the coping strategies among Asians. Research suggests that those who conceptualize psychopathology in terms of both psychological and physiological causes are the best candidates for seeking professional help. Also, interdependence conflicts such as interpersonal tension, social isolation, and group disharmony might be particularly salient for many Asians who maintain culturally proscribed interdependent representations of the self. Research also suggests that Asians with interdependent self-representations might attribute interpersonal problems according to situational rather than dispositional factors. Still, studies demonstrate that the Asian experience of psychopathology is heterogeneous. Experience appears to vary with acculturation such that mental health beliefs among recently arrived Asians might be more embedded in their native culture compared to those who have resided in the United States for a longer duration. Finally, psychologists and other mental health professionals must be mindful of the fact that psychiatric nomenclature that frequently is used in the West might fail to capture the psychosocial experience for certain segments of the Asian American population, especially for those who come from preliterate societies such as the Hmong refugees.



found that the depressed and nondepressed groups differed significantly on all HRSD items with the exception of the "suspicious of others" item. Fully 82% of the depressed group and only 30% of the nondepressed group acknowledged "feeling sadness" on the HRSD. The most frequently endorsed items for the depressed group were "feeling tired and fatigued," "pains and aches," and gastrointestinal or cardiovascular symptoms. Tension, nervousness, agitation, and restlessness also were endorsed by a majority of the depressed group.

Kinzie et al. (1982) developed and validated the 15-item Vietnamese language Depression Rating Scale, which provided information on both the universal and culture-variant aspects of depressive symptomatology. Results showed that Vietnamese normals and psychiatric outpatients reported symptoms common to Western psychiatric conceptualizations of depression such as poor appetite, various aches and pains, hopelessness, poor concentration, and exhaustion. Mood items such as "low-spirited" and "sad and bothered" also were readily endorsed. However, within-culture symptom patterns were noticed as well. The Vietnamese respondents reported a pervasive sense of suffering and anxiety surrounding their somatic symptoms. In addition, depression often was accompanied by feelings of shame and dishonor, a strong sense of desperation, fear of "going crazy," and feelings of demoralization associated with the inability to fulfill familial or ancestral obligations.

Unlike the preceding studies, a multinational, multicenter, psychiatric epidemiological study conducted by the World Health Organization did not report significant differences in depressive symptoms between Asians and other ethnic groups (Sartorius, Jablensky, Gulbinat, & Ernberg, 1980). One of the centers that participated in this study included 222 Japanese psychiatric outpatients in Nagasaki and Tokyo, Japan. Data from the Schedule for Standardized Assessment of Depressive Disorders (SADD) indicated that patients from each of the study sites (including India, Switzerland, Iran, and Canada) exhibited similar depressive symptoms such as sadness, joylessness, anxiety, tension, lack of energy, loss of interest, loss of ability to concentrate, and ideas of insufficiency, inadequacy, or worthlessness. Although there was a lack of symptomatic variation across the centers, the investigators acknowledged that the SADD might not have adequately measured culture-specific depressive patterns.

Factor analytic studies have been another method of examining symptom patterns in Asians. Principal component factor analysis combined with varimax rotation was applied to the Center for Epidemiologic Studies of Depression scale (CES-D) in Kuo's (1984) study of Asians in Seattle, Ying's (1988) study of Chinese in San Francisco, and Lin's (1989) study of residents in Tienjin, China. Although the reported CES-D factor structures and item indicators for these studies were quite similar to those found in Radloff's (1977) original CES-D study, there also were several important differences. Radloff originally obtained four interpretable factors for the CES-D using predominantly Caucasian communities in the United States. These factors were (1) depressed affect, (2) positive affect, (3) somatic and retarded activity, and (4) interpersonal problems (e.g., unfriendly, disliked, talk less, lonely). However, in Kuo's (1984) study, the four factors that accounted

for a total of 53% of the variance were (1) depressed affect and somatic complaints, (2) positive affect, (3) interpersonal problems, and (4) pessimism. Ying (1988) reported three factors that accounted for 43.2% of the variance and that were nearly identical to those found in Radloff's (1977) and Kuo's (1984) studies: (1) depressed affect and somatic complaints, (2) positive affect, and (3) interpersonal problems. Thus, the depressed affect and somatic complaints items emerged as one single factor in both Kuo's (1984) and Ying's (1988) studies. Lin (1989) failed to replicate this latter finding; however, he identified three factors that accounted for 47% of the variance for a sample of mainland Chinese. These factors consisted of (1) somatic-retarded activity, (2) interpersonal problems, and (3) depressed affect or affective mood. Thus, Lin's sample yielded two separate factors for depressed affect and somatic complaints, as originally reported for the Caucasian American sample in Radloff's (1977) study.

The discrepancies in these factor analytic findings were unexpected because it was assumed that the Seattle and San Francisco Chinese, whom presumably were more Americanized than the mainland Chinese, would respond more similarly to Radloff's (1977) sample than would their overseas counterparts. This might be explained by differences in the translation of the CES-D or other methodological procedures. Furthermore, these unexpected findings might be attributed to the fact that acculturation involves other variables such as cultural attitudes, lifestyle practices, and English language proficiency in addition to place of birth or residency. Nevertheless, the CES-D factor analytic results for the two Asian American samples were consistent; depressed affect and somatic complaints emerged as one factor.

Factor analytic studies also have been performed for Zung's SDS. Chang (1985) reported that a mixture of affective and somatic complaints accounted for most of the variance in a Black college student sample, whereas existential (e.g., "loss of interest in life," "feeling that the future is hopeless") and cognitive (e.g., "mind is not alert," "thoughts are confused") concerns contributed to the most variance for Caucasian students. However, the factor that contributed to the most variance for overseas Chinese students was characterized by somatic complaints. Chang noted, however, that the Chinese did not have quantitatively less affective complaints; rather, the affective components were not "grouped" with the somatic symptoms.

These findings were similar to those of Marsella et al.'s (1973) earlier factor analysis of the SDS. In Marsella and colleagues' study, the Japanese, Chinese, and Caucasians all evidenced similar patterns of existential complaints. However, cognitive complaints were somewhat independent for the Japanese and Chinese, whereas cognitive complaints usually were associated with other areas of functioning (e.g., existential complaints) for the Caucasians. For the Chinese, there also appeared to be a clear pattern of depression associated with somatic complaints, whereas the other groups manifested somatic symptoms with other disturbances. Finally, interpersonal complaints proved to be the best indicator of depression mainly for the Japanese.

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Factor analytic studies of the CES-D and Zung's SDS demonstrate the centrality of somatic concerns among Asians. The differences in sample populations (e.g., students, community samples, treated cases), instrumentation, and methodology among these studies only serve to strengthen the argument that Asians and Asian Americans manifest depression in ways that are different from other comparison groups.

Cultural differences in symptom expression have been the focus of studies on somatization among Asians. *Somatization* refers to an expression of distress that is manifested as general or vague physical complaints. This might involve general aches and pains in the extremities or head, weakness throughout the body, nausea or upset stomach, or numbness and tingling. Westermeyer, Bouafuely, Neider, and Callies (1989) found several correlates to somatization among Hmong refugees. These included older age, a limited formal education, unemployment, and English nonfluency.

Several theories have been offered to explain the high incidence of somatization among Asians. As suggested previously, traditional health beliefs may lead to the expression of somatic symptoms. Thus, a problem, be it physiological, social, or affective in origin, may be expressed in both physical and psychological domains as specified by the soma and psyche conceptualization of health. It also has been suggested that the shame and stigma that are attached to psychological distress in the Asian culture might inhibit Asians from reporting mental health problems (Sue & Sue, 1987; Tsai, Teng, & Sue, 1980). Mechanic (1980) proposed that reporting physical symptoms might be more "culturally neutral," whereas reporting psychological symptoms is more dependent on social acceptability. Thus, somatization allows Asians to "save face" in the event of psychological distress. Lin (1989) argued that the high rate of somatic complaints among the Chinese reflects cultural rather than cognitive preferences, and given appropriate structured inquiry, the Chinese can express cognitive symptoms. For instance, Lin explained that the open-ended probing of most diagnostic or descriptive instruments might elicit a high number of somatic complaints among the Chinese. Nevertheless, Beiser & Fleming (1986) found no relationship between reports of depressive symptoms and somatization among Southeast Asian refugees. This latter finding disputes the notion that somatization is a substitute for psychosocial distress. Thus, Asians possess the capacity to express themselves in psychological terms, although somatic complaints might predominate their symptom presentation. This was clearly evidenced in Cheung's (1982) sample of Hong Kong Chinese who endorsed psychological symptoms equally as, if not more so than, physiologically based symptoms. According to Rumbaut (1985), researchers often assume that somatization among Asians stems from their tendency to deny or suppress emotions, which only serves to perpetuate cultural stereotypes of Asians. Rumbaut stated,

Instead of illuminating our understanding of affective processes, the "somatization" concept seems to us to function more as a superficial and prejudicial mode

of dismissing complex psychocultural realities and of discrediting the experience of human suffering of different social classes. While the expression of emotional pain may be socially stigmatized or culturally proscribed in particular situations, the emotional experience of human suffering—certainly as reflected in the [Southeast Asian] refugee experience we have studied—emerges as transcultural and universal. (p. 476)

In sum, the research illustrates that Asians and Asian Americans may exhibit different symptom patterns than do other ethnic groups. This is most evident in studies of various culture-specific syndromes such as *koros* (as documented in the Chinese and Southeast Asian cultures) and *hwabyung* (as documented in the Korean culture). Studies of symptom expression for Western constructs of mental health also reveal significant cultural differences. This is especially the case for depression; bodily symptoms that include gastrointestinal problems, headaches, palpitations, and physical weakness may predominate the symptom presentation of depressed Asians. Still, Asians experience emotional distress and have the capacity to express psychological difficulties, although such somatic complaints might be more readily apparent. There are cultural factors that may, nonetheless, contribute to somatization such as cultural stigma and traditional health beliefs. Finally, Rumbaut (1985) contended that the concept of somatization should be reconsidered because it perpetuates Asian stereotypes and often dismisses the notion that emotional suffering transverges cultural boundaries.

## PREVALENCE

How are rates of mental disorders determined, and are assessment and diagnostic procedures valid for Asian Americans? Currently, the prevalence of psychopathology in the Asian American population is unknown because of the lack of large-scale studies. Although estimates from the Epidemiologic Catchment Area Study indicated that nearly 20% of the American population either had experienced a mental disorder within the past 6 months or currently were experiencing one, prevalence rates for the Asian American community were not established because of inadequate sampling (Meyers et al., 1984). Researchers have, nonetheless, estimated the rates of mental illness among Asian Americans using treated and untreated case methods. Furthermore, culturally sensitive assessment and diagnostic instruments have been developed that have made important contributions to prevalence studies, as will be discussed later in this section. First, estimated rates of mental illness among Asians, as determined by treated and untreated cases, are examined.

### ***Treated Cases***

Researchers have estimated prevalence by examining the number of Asian Americans who have sought services for their mental health needs. Although this

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**Findings:** fewer Asian Americans than were Caucasians were admitted to hospitalization. Based on age, 60, whereas Caucasians were 60 period. Mean age was 180 per 100, (1970) showed lower hospitalizations to the 1969-1970 missions to station in Hawaii 28.3% of the population), Hawaiian (1.5% d

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treated case method is inadequate because Asian Americans tend to underutilize mental health services, it provides an initial step to gaining a better understanding of the extent of mental disorders among Asian Americans.

Findings from early treated case studies suggested that proportionally far fewer Asian Americans were suffering from mental illnesses compared to other ethnic groups. For instance, Kitano (1969) found that Japanese and Chinese Americans were admitted to California state hospitals from 1960 to 1965 less often than were Caucasian Americans relative to their proportions in the state population. Based on admission rates per 100,000, Japanese rates ranged from 40 to 60, whereas Chinese rates ranged from 70 to 90 each year during the 1960-1965 period. Meanwhile, the Caucasian rates during this period ranged from 150 to 180 per 100,000. Similarly, results from a study conducted by the state of Hawaii (1970) showed that the Chinese, Hawaiians, Japanese, and Filipinos displayed lower hospital admission rates for mental disturbances than did Caucasians during the 1969-1970 period. In that study, Caucasians comprised 48.5% of first admissions to state hospitals, although they accounted for only 39.2% of the population in Hawaii. This was compared to the Japanese (15% of first admissions, 28.3% of the population), Filipinos (8% of first admissions, 12.4% of the population), Hawaiians (0.6% of first admissions, 9.3% of the population), and Chinese (1.5% of first admissions, 6.8% of the population).

Sue and Sue (1974) also reported low utilization rates of mental health services among Asian American college students. For example, Sue and Sue found that only 4% of all students who used a campus psychiatric clinic were Chinese or Japanese American, yet both ethnic groups together comprised approximately 8% of the total student population. Such low utilization rates suggested that the Asian American students were relatively well adjusted compared to their non-Asian counterparts. However, Sue and Sue found that those Asian American students who were treated by the university clinic had higher Minnesota Multiphasic Personality Inventory scale scores and more psychotic profiles than did non-Asian American clients. They consequently argued that the most severely disturbed Asian American clients were more likely to use mental health services than were those with milder problems.

Sue and McKinney (1975) found similar results in a 3-year comprehensive study of Asian American patients who were treated at 17 community mental health centers in the Seattle area. These researchers discovered that only 0.7% of the patients were Asian Americans, although this ethnic group represented approximately 2.4% of the population served by these centers. Congruent with Sue and Sue's (1974) findings, Sue and McKinney (1975) reported that those Asian Americans who sought services were more severely disturbed. Thus, those who used services received a higher proportion of psychotic diagnoses than did Caucasian American patients, even when demographic differences such as age and educational level were controlled.

The preceding research studies illustrate that Asian Americans are more severely impaired despite their underutilization of mental health services. This supports the assertion by Sue and colleagues (Sue & Morishima, 1982; Sue & Sue,

1987) that only the most severely disturbed Asian American clients tend to seek treatment. This also was evidenced by Brown, Stein, Huang, and Harris (1973), who found that Chinese American inpatients at a community mental health center exhibited more serious psychotic behaviors than did Caucasian inpatients, although the two groups did not differ on psychiatric diagnosis and were matched on sex, age, and economic and legal admission status. More recently, records for all adult inpatient and outpatient clients seen in the Los Angeles County mental health system from 1983 to 1988 revealed that a greater proportion of Asian American clients received psychotic diagnoses than did Caucasian American clients (Flaskerud & Hu, 1992). In addition, Asian Americans were diagnosed with major affective disorders more often than were African or Latino Americans, and a greater number of Asian Americans than Caucasian Americans were diagnosed with schizophrenia. Finally, in another study that focused on Chinese and Caucasian American outpatients who used Los Angeles County mental health services, Eastman (1991) found that proportionally more Chinese Americans than Caucasian Americans were diagnosed with major depression.

### *Untreated Cases*

Prevalence rates of psychopathology also can be estimated by examining untreated community samples rather than treated client populations. Researchers following this method assess psychopathology by using self-report measures, interviews, or rating instruments, often through face-to-face or telephone contact with community residents. A few untreated case studies have suggested that the rates of psychopathology in the Asian American community might be as high as, or even higher than, those in other ethnic communities.

From their interviews of adult residents in a large Chinatown community, Loo et al. (1989) found that more than one-third of their sample admitted to symptoms of emotional tension. Feelings of depression also were common among the residents, with 4 out of 10 complaining of a "sinking feeling like being depressed." In addition, a quarter of the residents admitted to having "periods of days, weeks, or months when [they] couldn't take care of things because [they] couldn't get going." In regard to feelings of loneliness, more than half of the respondents wished that there was someone they could really talk to. Furthermore, loneliness was surprisingly more prevalent among younger adults than among the elderly. Finally, Loo and colleagues reported that 35% of the respondents endorsed four or more items on the Langner Scale, whereas 20% acknowledged seven or more items. Such endorsement rates on the Langner Scale traditionally have been considered to be indications of psychiatric impairment. The two most frequently endorsed Langner Scale items included "a memory that's not all right" (40%) and "worrying a lot" (42%). Loo and colleagues concluded that the former result might have been related to the predominant elderly representation in the Chinatown community and the latter to the combination of disadvantaged status and age. Although this sample was not representative of the

general Chinese in a particular

Several studies using the CES-I found that Chinese, Japanese, and more depressed than Caucasians. High levels of Chinese American a telephone survey found them to be significantly higher in the study. Still, it is given their diagnosis.

In a review of untreated case groups, Vega and colleagues is much less common at the national-level explanation. Nevertheless, untreated cases of depression have low rates when rates of depression in the group differ significantly from the general orders among ethnic groups.

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Past case studies have diagnosed (i.e., identified) cases on symptoms. For example, a case of overactive and a case of Western meyer's mother, who was next world. The delusional disorder's condition and the dosage of the medication.

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general Chinese American population, this study points to the levels of distress in a particular ethnic Chinese enclave.

Several studies have examined the rates of depression among Asian Americans using the CES-D. Surveying Asian Americans living in Seattle, Kuo (1984) found that Chinese, Japanese, Filipino, and Korean American immigrants reported slightly more depressive symptoms, on average, than did Caucasian respondents in other studies. Also using the CES-D, Hurh and Kim (1990) similarly found that Korean immigrants residing in Chicago had higher scores for depression than did Caucasians. High rates of depression were once again revealed in a telephone survey of Chinese Americans in San Francisco. Using the CES-D, Ying (1988) conducted a telephone survey among Chinese Americans in the San Francisco area and found them to be significantly more depressed than the Chinese Americans in Kuo's study. Still, it is difficult to compare the CES-D findings among these studies given their differences in methodological and sampling procedures.

In a review of the literature on the mental health of various ethnic minority groups, Vega and Rumbaut (1991) remarked that knowledge of Asian Americans is much less developed than for African Americans and Latinos and that no national-level epidemiological surveys have been conducted with this ethnic population. Nevertheless, tentative conclusions can be derived from the treated and untreated case studies presented here. First, there is no indication that Asian Americans have lower rates of mental disturbance than those of Caucasians, especially when rates of depression are considered. Second, there are important within-group differences (e.g., between Koreans and Chinese) in the prevalence of disorders among Asian Americans.

The validity of diagnostic and assessment procedures is a central issue in studying the rate and distribution of mental disorders among Asian Americans. If case-finding strategies or assessment procedures are inappropriate or culturally biased, then it is difficult, if not impossible, to accurately estimate the prevalence of disorders. Although reasonable efforts have been made by investigators to consider the issue of cultural bias in assessment, it is difficult to determine the actual extent to which cultural factors affect assessment findings.

Past case illustrations indicate that Asian American clients might be overdiagnosed (i.e., inappropriately defined as psychiatric cases) when cultural influences on symptom presentation are overlooked. Westermeyer (1987) illustrated a case of overdiagnosis of a 48-year-old Chinese woman who was given antipsychotic and antidepressant medication for psychotic depression. According to Westermeyer, a decisive factor in her diagnosis lay in her belief that her deceased mother, whom she had seen in her dreams, had returned to bring her into the next world. Later, it was recognized that this symptom was not indicative of a delusional disorder but instead was congruent with her cultural beliefs. The patient's condition improved once her antipsychotic medication was discontinued and the dosage of her antidepressants was reduced.

By contrast, behaviors that appear to be normative to the Asian culture might, in fact, indicate mental illness on closer inspection. For example, Westermeyer (1987) presented a clinical case involving a 26-year-old Vietnamese refugee who

spoke in a philosophical manner and wore religious garb on admission to a psychiatric clinic. The attending psychiatric resident's diagnosis revealed minor anxiety symptoms but no serious psychopathology. However, information from the patient's ethnic peers revealed that the patient wore odd clothing and held bizarre religious notions that were inconsistent with their cultural norms. Further evaluation showed that the patient viewed himself as a reincarnation of Buddha, Christ, and Mohammed who had been sent to save the world. In addition, organic testing indicated that the patient suffered from brain damage.

Language barriers pose additional challenges in the assessment of Asian Americans. As mentioned previously, researchers have argued that many non-Western languages do not possess cultural equivalents for numerous Western psychological constructs. Interpreters often cannot overcome such language barriers and, even worse, might further compound the difficulties in assessing Asian American clients. As Sue and Sue (1987) mentioned, the inclusion of interpreters expands the therapeutic process to a triadic situation, thus increasing the risk for miscommunication and inaccurate diagnoses. Marcos (1979) also found that the attitudes and personal beliefs of the interpreters might distort their translations. In this case, an interpreter might minimize pathology or avoid culturally sensitive issues such as sexual relations and death, especially if the interpreter is related to the client.

Given these difficulties in the assessment and diagnosis of Asian Americans, what can be done to improve measurement strategies? Sue and Sue (1987) provided a conceptual overview of measurement strategies that have been used with ethnic minority groups. The first strategy, point research, entails the application of measures of one culture with members in a different culture. In this case, scores on the measures are compared between cultures and are interpreted according to the norms of the culture from which the instrument was developed. For example, the Hopkins Symptom Checklist, which was developed in the West, was translated for use with Southeast Asian refugees (Mollica, Wyshak, de Marneffe, Khuon, and Lavelle (1987). Clearly, there are potential problems in using this point research approach. One must be cautious in using emic (or culturally specific) assessment instruments in an etic (or cross-cultural) manner. By using a culturally specific assessment tool in another culture, one is assuming that all cultures share the same construct that is to be measured. The inherent difficulties of point research are illustrated in a study by Takeuchi, Kuo, Kim, and Leaf (1989), who found that 54 scale items on the Symptom Checklist (SCL) did not correspond to the SCL's five hypothesized factors (anxiety, depression, interpersonal sensitivity, obsessive-compulsive, and somatization) among four ethnic groups that resided in Hawaii. Among the different groups, Caucasians appeared to have the best fit between empirical and hypothesized factors on the SCL, followed by the Japanese, Filipinos, and Native Hawaiians. Kinzie and his colleagues (1982) similarly showed that the Beck Depression Inventory exhibited low reliability and validity among the Vietnamese. These studies illustrate that the validity and reliability of point research findings often are open to question.

The second assessment strategy, linear research, involves a series of studies that are used to systematically test hypotheses related to the construct under in-

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## CONCLUDING

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vestigation. Similar to the point research strategy, a measure is developed in one culture and then applied to another culture. However, in linear research, several studies using the measure are conducted to provide additional points of reference from which to compare groups. The construct of interest can then be considered etic in nature (or suitable for cross-cultural comparison) if the hypotheses in each study are supported. A multimethod approach is another strategy that is related to the linear model in that several tests are conducted but with multiple measures to test a particular construct. Consistent differences across measures in support of hypotheses provide strong evidence that real cross-cultural differences exist. However, incongruence between findings across measures leads to problematic construct validity.

Finally, in a parallel assessment approach, a combined etic-emic strategy is followed such that an etic construct is identified and then an emic measure is developed to test the validity and reliability of the construct in each culture. Cross-cultural comparisons are made based on the emically defined construct. This approach offers a comparative evaluation of a construct across cultures without restriction from any single cultural frame of reference. An illustration of the parallel approach is found in a study by Kinzie (1982) describing the development of the Vietnamese Depression Inventory. In short, Kinzie and colleagues (1982) collaborated with four bilingual Vietnamese mental health workers to develop a measure of depression for Vietnamese patients using Vietnamese words that described feelings or behaviors associated with depression. After a series of validity and reliability procedures were conducted, it was found that differences between Vietnamese and Western reports of depression were attributed to culturally distinct constructs. Adoption of research strategies with parallel approaches is difficult to conduct, but these strategies are ultimately the most valuable because they enable us to accurately assess psychopathology for different cultural groups.

The preceding studies show that our knowledge of the nature and extent of psychopathology among the Asian American population is growing but still quite limited. Nevertheless, data from treated and untreated case methods indicate that Asian Americans do not have lower rates of mental disturbance than Caucasians. Furthermore, there are significant within-group differences in prevalence rates among Asian Americans. Many of our current diagnostic and assessment procedures that are used in prevalence studies have been validated using Caucasian populations, which might contribute to cultural bias toward Asian Americans. Culture-specific instruments, as applied in parallel research, might help resolve this dilemma by using the native language and emic constructs of a particular culture to assess its psychocultural experience.

## CONCLUDING COMMENTS

The proposed Vulnerability-Experience-Manifestation-Prevalence model highlights the role of culture and minority group status in these primary components of psychopathology. However, there are numerous questions that are left unan-

swered. For example, in regard to Vulnerability, future research could address questions such as "What is the role of psychobiology in mental illness for Asian Americans?" Studies also could further examine the process of adjustment among traumatized Southeast Asian refugees. In this case, the impact of PTSD on the functioning of the Southeast Asian family remains unclear. One can only speculate on the magnitude of problems that Southeast Asian families experience given that multiple family members often suffer from the debilitating effects of PTSD.

In regard to Experience, future research could investigate how the organization and perception of adjustment problems affects the outcome of psychotherapy for Asian clients. For example, one can hypothesize that outcome is more favorable for Asian clients if they hold similar notions of the causes and nature of adjustment problems as their therapists. Moreover, such incidences of "cognitive match" might be more likely if both the therapist and client share the same ethnic background or cultural beliefs. These issues currently are being investigated in a study conducted by the National Research Center on Asian American Mental Health.

Questions also remain regarding the Manifestation of psychopathology among Asian Americans. The cultural mechanisms in symptom expression could be further explored. For instance, studies could resolve the conflicting findings on the relationship between acculturation and somatization. This could be achieved by first developing a comprehensive index of acculturation that evaluates acculturation on a global level to include demographic background, cultural attitudes, and traditional practices. Such a global measure of acculturation could then be used to identify those who are more likely to somatize their distress. Past research on symptom expression and help-seeking behavior suggests that this has important implications for developing treatment services that are responsive to Asian clients who may be more inclined to first seek medical help for underlying psychopathological conditions.

Finally, large-scale studies that use culturally sensitive measures are needed to determine the Prevalence of mental disorders among Asian Americans. Toward this end, current measures used in the study of psychopathology need to be assessed for their validity in various ethnic groups. Multimethod approaches need to be used, and where constructs are found to be invalid, emic measures might need to be developed in accordance with the parallel assessment approach. One recent development might have major implications for understanding the prevalence of psychopathology in the Asian American population. The National Research Center on Asian American Mental Health has been awarded a National Institute of Mental Health research grant to conduct a 5-year, large-scale study of the prevalence of mental disorders among Chinese Americans. The intention of this study is to ascertain the rate and distribution of mental disorders and identify correlates (e.g., immigrant status, stressors, resources) to mental health. It is hoped that insights into processes that affect mental health will be gained, not only for Chinese Americans but also for Asian Americans in general.

## Recommendations

Several conclusions from this review suggest that future studies on Asian American mental health should be conducted at the community level, existing models of mental health care they are valid and effective, and that the coping model of mental health care, such as Southeast Asian American resources, such as stressors. Second, the model should be an Asian American model. Third, such a model might argue that though its own Asian American stress in a culture of this chapter is a primarily social. Third, such a new model of The stress-coping that accounts and even trauma.

This conclusion approaches to be considered individual elements then be developed Asian American to the relevant.

These conclusions be examined cross-analysis would entail a series of in cultural community across evaluation sample. However, larger sample existing measures microanalysis be applied.

### Recommendations

Several conceptual and methodological recommendations might advance these future studies of psychopathology among Asian Americans. First, on a conceptual level, existing models of psychopathology should be evaluated to determine whether they are valid for Asian Americans. For example, research indicates that the stress-coping model of mental illness may be applied to Asian American populations such as Southeast Asian refugees whose adjustment has been linked to both coping resources, such as social and financial supports, and exposure to environmental stressors. Second, if such models prove to be valid, then their individual elements should be analyzed to determine whether they are fundamentally different for Asian Americans. Using the stress-coping model as an example once again, one might argue that there are important cultural differences within this model, although its overall theoretical scheme applies to Asian Americans. For instance, Asian Americans might initiate unique coping strategies because they perceive stress in a culturally distinct manner. This was evidenced in the Experience section of this chapter, which illustrated that Asians may perceive or organize stress on a primarily somatic basis, which in turn influences their help-seeking behavior. Third, such instances of cultural variability should be organized to formulate a new model of psychopathology that builds on the theories of existing models. The stress-coping model might therefore develop into a more complex model that accounts for the influence of cultural attitudes, beliefs, problem perception, and even traditional health practices that are embedded in Asian cultures.

This conceptual scheme integrates the multimethod and parallel assessment approaches mentioned earlier. For instance, the overall stress-coping model may be considered etic in nature, but cultural differences might exist within its individual elements. Using the parallel assessment approach, an emic measure can then be developed that better identifies and measures the construct within the Asian American population. The integration of emic elements thus contributes to the relevance and validity of the overall model.

These conceptual issues in the study of Asian American psychopathology can be examined using a two-stage methodological strategy. In the first stage, a microanalysis of a heterogeneous Asian American sample can be performed. This would entail gathering data on indigenous conceptualizations and expressions of psychopathology from a small cross section of Asian American groups through a series of in-depth interviews. This would allow researchers to identify important cultural constructs of mental health and to estimate group differences or heterogeneity across Asian American populations. The second stage would involve the evaluation of the data gathered from the first stage on a macro level using a larger sample. However, practical constraints would prevent in-depth analysis of a larger sample; thus, the best possible instruments must be selected from existing measures, or new measures might have to be developed based on the microanalytic data from the first stage. Finally, the selected measures can then be applied in an epidemiological study throughout the Asian American population

that will identify and describe those factors that might contribute to or prevent psychopathology.

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